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(FILE 'HOME' ENTERED AT 19:34:48 ON 29 APR 2003)

FILE 'MEDLINE, CAPLUS, BIOSIS, SCISEARCH' ENTERED AT 19:35:00 ON 29 APR  
2003

L1 290545 S TREHALOSE OR OLIGOSACCHARIDE OR POLYSACCHARIDE  
L2 2077 S LOAD? (6A) PLATELET  
L3 21 S L1 AND L2  
L4 9 DUP REM L3 (12 DUPLICATES REMOVED)  
L5 37298 S LOAD? (7A) (PLATELET OR CELL)  
L6 170 S L1 AND L5  
L7 35190 S LOAD? (6A) (PLATELET OR CELL)  
L8 81 S L1(S)L7  
L9 50 DUP REM L8 (31 DUPLICATES REMOVED)

=> d au ti so ab 1-9 14

L4 ANSWER 1 OF 9 MEDLINE DUPLICATE 1  
AU Crowe John H; Tablin Fern; Wolkers Willem F; Gousset Karine; Tsvetkova  
Nelly M; Ricker Josette  
TI Stabilization of membranes in human platelets freeze-dried with  
trehalose.  
SO CHEMISTRY AND PHYSICS OF LIPIDS, (2003 Jan) 122 (1-2) 41-52.  
Journal code: 0067206. ISSN: 0009-3084.  
AB Human blood platelets are normally stored in blood banks for 3-5 days,  
after which they are discarded. We have launched an effort at developing  
means for preserving the platelets for long term storage. In previous  
studies we have shown that trehalose can be used to preserve  
biological membranes and proteins during drying and have provided evidence  
concerning the mechanism. A myth has grown up about special properties of  
trehalose, which we discuss here and clarify some of what is fact  
and what is misconception. We have found a simple way of introducing this  
sugar into the cytoplasm of platelets and have successfully freeze-dried  
the trehalose-loaded platelets, with very  
promising results. We present evidence that membrane microdomains are  
maintained intact in the platelets freeze-dried with trehalose.  
Finally, we propose a possible mechanism by which the microdomains are  
preserved.

L4 ANSWER 2 OF 9 MEDLINE DUPLICATE 2  
AU Wolkers Willem F; Looper Sheri A; McKiernan Ariane E; Tsvetkova Nelly M;  
Tablin Fern; Crowe John H  
TI Membrane and protein properties of freeze-dried mouse platelets.  
SO MOLECULAR MEMBRANE BIOLOGY, (2002 Jul-Sep) 19 (3) 201-10.  
Journal code: 9430797. ISSN: 0968-7688.  
AB Membrane properties and the overall protein secondary structure of  
freeze-dried trehalose-loaded mouse platelets  
were studied using steady state fluorescence anisotropy and Fourier  
transform infrared spectroscopy (FTIR). FTIR results showed that fresh  
control mouse platelets have a main phase transition at approximately 14  
degrees C, whereas, freeze-dried platelets exhibited a main phase  
transition approximately 12 degrees C. However, the cooperativity of the  
transition of the rehydrated platelets was greatly enhanced compared to  
that of control platelets. Anisotropy experiments performed with 1,6  
diphenyl-1,3,5 hexatriene (DPH) complemented FTIR results and showed that  
the lipid order in the core of the membrane was affected by freeze-drying  
procedures. Similar experiments with trimethyl ammonium 1,6  
diphenyl-1,3,5 hexatriene (TMA-DPH), a membrane surface probe, indicated  
that membrane properties at the membrane/water interface were less  
affected by freeze-drying procedures than the core of the membrane.  
Lyophilization did not result in massive protein denaturation, but the  
overall protein secondary structure was altered, based on in situ  
assessment of the amide-I and amide-II band profiles.

Lyophilization-induced changes to endogenous platelet proteins were further investigated by studying the protein's heat stability. In fresh control platelets, proteins denatured at 42 degrees C, whereas proteins in the rehydrated platelets denatured at 48 degrees C.

L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS  
IN Wolkers, Willem F.; Crowe, John H.; Tablin, Fern; Oliver, Ann E.; Walker, Naomi J.  
TI Stabilization of therapeutic platelets  
SO PCT Int. Appl., 36 pp.  
CODEN: PIXXD2  
AB A dehydrated compn. is provided that includes freeze-dried platelets. The platelets are loaded with trehalose which preserves biol. properties during freeze-drying and rehydration. The trehalose loading is conducted at temps. from 25 to 40.degree., most preferably at 37.degree., with the loading soln. having trehalose in an amt. from about 10 mM to about 50 mM. These freeze-dried platelets are substantially shelf-stable and are rehydratable so as to have a normal response to an agonist, e.g., thrombin, with virtually all of the platelets participating in clot formation within about 3 min at 37.degree.. Platelet suspensions were prep'd. and ristocetin was added to the platelet. The clot formation was 95-100% for the agonist tested.

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS  
IN Stienstra, Stoffer  
TI Platelet stabilization by treatment with carbohydrates  
SO PCT Int. Appl., 10 pp.  
CODEN: PIXXD2  
AB Disclosed is a method for the prodn. of stabilized platelets, comprises the steps of: (i) pre-activating platelets, to induce the formation of microvesicles; (ii) contacting the pre-activated platelets with a carbohydrate, esp. trehalose, whereby the carbohydrate is incorporated into the platelets; and (iii) drying the thus-loaded platelets.

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS  
IN Roser, Bruce J.; De Vos, Diana  
TI Compositions for stabilizing platelets for dry storage  
SO U.S. Pat. Appl. Publ., 15 pp., Cont. of U.S. Ser. No. 366,810, abandoned.  
CODEN: USXXCO  
AB The invention provides methods for drying platelets to obtain compns. which are storage stable over a wide range of temps. and for an extended period of time. The invention also provides methods for permeabilizing platelets which allows them to be loaded with various compds. Platelets were acid permeabilized. After addn. of stop buffer, the mixt. was centrifuged at room temp. at 1800 rpm for 10 min to pellet the platelets. Drying buffer was prep'd. by bringing the pH of HEPES-buffered saline to 7.0 using 2M and 0.2M NaOH. To 10 mL of this buffer 50 .mu.L hirudin (10 U/mL); 6.25 .mu.L apyrase (20 U/mL); 1 mg magnesium sulfate; 0.1 g trehalose; and 0.1 g. BSA were added. Resuspended platelets (300 .mu.L) was carefully pipetted into 3 mL siliconized glass pharmaceutical vials and dried.

L4 ANSWER 6 OF 9 MEDLINE DUPLICATE 3  
AU Wolkers W F; Walker N J; Tablin F; Crowe J H  
TI Human platelets loaded with trehalose  
survive freeze-drying.  
SO CRYOBIOLOGY, (2001 Mar) 42 (2) 79-87.  
Journal code: 0006252. ISSN: 0011-2240.  
AB Human blood platelets are stored in blood banks for 5 days, after which they are discarded, by federal regulation. This short lifetime has led to a chronic shortage of platelets, a problem that is particularly acute in immunosuppressed patients, such as those with AIDS. We report here that

platelets can be preserved by freeze-drying them with **trehalose**, a sugar found at high concentrations in organisms that naturally survive drying. We suggest that these findings will obviate the storage problem with platelets. **Trehalose** is rapidly taken up by human platelets at 37 degrees C, with loading efficiencies of 50% or greater. Fluid-phase endocytosis plays an important role in this efficient uptake of **trehalose**, but other mechanisms may also be involved. **Trehalose-loaded platelets** were successfully freeze-dried, with excellent recovery of intact platelets. Rehydration from the vapor phase led to a survival rate of 85%. The response of these platelets to the agonists thrombin (1 U/ml), collagen (2 microg/ml), ADP (20 micromM), and ristocetin (1.6 mg/ml) was almost identical to that of fresh, control platelets. Analysis by Fourier transform infrared spectroscopy demonstrated that the membrane and protein components of **trehalose-loaded platelets** after freeze-drying, prehydration, and rehydration were remarkably similar to those of fresh platelets.

L4 ANSWER 7 OF 9 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Tablin, Fern (1); Wolkers, Willem F.; Walker, Naomi J. (1); Crowe, John H.  
TI **Trehalose loaded, freeze-dried human platelets**  
are functional and retain normal protein structure and membrane phospholipid phase transitions.  
SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 62a. print.  
Meeting Info.: 42nd Annual Meeting of the American Society of Hematology  
San Francisco, California, USA December 01-05, 2000 American Society of Hematology  
. ISSN: 0006-4971.  
AB Human platelets can be preserved by freeze-drying them with **trehalose**, a sugar found at high concentrations in organisms that naturally survive drying. **Trehalose** is rapidly taken up by human platelets at 37oC, with loading efficiencies of 50% or greater. Fluid phase endocytosis plays an important role in this remarkably efficient uptake of **trehalose**. **Trehalose-loaded platelets** were successfully freeze-dried with excellent recovery of intact platelets. Rehydration from the vapor phase led to a survival rate of 85% Aggregometry of rehydrated freeze-dried platelets demonstrated that they were responsive to thrombin (1U/ml) collagen (2mug/ml) ADP (20mum) and ristocetin (1.6mg/ml), in an almost identical manner to fresh control platelets. Analysis by Fourier transform infrared (FTIR) spectroscopy of the amide II region (1550 cm<sup>-1</sup>), demonstrated that the protein components of **trehalose-loaded platelets** after freeze-drying, prehydration and rehydration were remarkably similar to fresh platelets containing primarily beta sheet and turn structures. Treatment of fresh platelets with thrombin showed platelet denaturation as demonstrated by the presence of significant numbers of alpha helixes. Analysis of membrane phospholipid phase transitions by FTIR demonstrated that **trehalose-loaded freeze-dried rehydrated platelets** had a phase transition virtually identical to that of control fresh platelets. Thrombin activated platelets, by comparison, showed several transitions, suggestive of phase separation. **Trehalose-loaded freeze-dried platelets** are stable for up to 2 weeks at -20oC and remain stable once rehydrated for up to six hours. These studies demonstrate that we can successfully load, freeze-dry and rehydrate non-fixed platelets, and have them maintain normal structure and function in the rehydrated state.

L4 ANSWER 8 OF 9 MEDLINE DUPLICATE 4  
AU Reid T J; Esteban G; Clear M; Gorogias M  
TI Platelet membrane integrity during storage and activation.  
SO TRANSFUSION, (1999 Jun) 39 (6) 616-24.  
Journal code: 0417360. ISSN: 0041-1132.  
AB BACKGROUND: The platelet cell membrane appears to undergo a lipid-phase

transition on cooling from 23 degrees C to 4 degrees C. Consequences of this phase transition are leakage of cellular material and irreversible cellular damage. Whether agents, of known benefit in protecting membranes and proteins from cooling and drying injury, could also protect platelets was investigated. Leakage of cytosolic components was assessed by measuring the release of fluorescein into the surrounding medium. STUDY DESIGN AND METHODS: Fresh platelets were suspended in 5 percent dimethyl sulfoxide (DMSO) or in 5 mM of one the following agents: glucose, trehalose, sucrose, glycerol, ethylene glycol, 1,2-propanediol, or L-proline. Platelets were loaded with 10 nM fluorescein diacetate (FD), chilled at 4 degrees C for 24 hours or frozen at -1 degree C per minute to -70 degrees C, warmed rapidly at 37 degrees C, and centrifuged, and the supernatant was measured for the presence of fluorescein. The effect of FD on platelets was assessed by agglutination with ristocetin, aggregation with thrombin and ADP, platelet-induced clot retraction, and expression of p-selectin. Platelet function and activation before and after freezing or cooling were measured by the same methods. RESULTS: By flow cytometry, 98 percent of the platelets incorporated FD. The trapped fluorescein resulted in neither platelet activation ( $p = 0.9$ ) nor reduction of platelet function ( $p = 0.12-0.94$ ) from that in control platelets. Freezing of platelets in DMSO caused far less release of fluorescein than did freezing with other agents ( $p < 0.001$ ) or chilling of platelets at 4 degrees C for 24 hours ( $p < 0.0001$ ). Supernatant levels of fluorescein correlated inversely with platelet function. Fluorescein was also shown to be released during aggregation with thrombin or ADP but not during agglutination with ristocetin. CONCLUSIONS: Release of fluorescein into the surrounding medium indicated a loss of platelet membrane integrity and function. Cellular loading with FD is a simple method of studying membrane integrity of platelets and other cells.

L4 ANSWER 9 OF 9 MEDLINE DUPLICATE 5  
AU Hildreth J E; Derr D; Azorsa D O  
TI Characterization of a novel self-associating Mr 40,000 platelet glycoprotein.  
SO BLOOD, (1991 Jan 1) 77 (1) 121-32.  
Journal code: 7603509. ISSN: 0006-4971.  
AB A novel platelet glycoprotein has been purified and characterized. This glycoprotein, designated Pltgp40, is an acidic sialylated 40,000-dalton protein that bears both O-linked and N-linked oligosaccharides. Treatment of Pltgp40 with neuraminidase resulted in a 5,000-dalton reduction in its Mr and a 1.5 Unit alkaline shift in the isoelectric point, indicating the presence of a large number of sialic acid residues. A similar size reduction and change in pl were observed after treatment of Pltgp40 with O-glycanase showing that sialic acids are present on O-linked oligosaccharides. Digestion of Pltgp40 with N-glycanase reduced the Mr to approximately 20,000 daltons but did not affect the isoelectric point, suggesting that Pltgp40 contains six to seven nonsialylated N-linked carbohydrate chains. High Mr proteins were observed in affinity purified Pltgp40 and were identified as detergent-stable protein oligomers consisting of multiple 40,000-dalton monomers. Immunodepletion and direct binding studies indicated that Pltgp40 was not equivalent to Ig Fc receptor type II, another 40,000-dalton glycoprotein expressed on platelets. However, Pltgp40 copurified with Fc receptor type II when platelet extracts were loaded onto human IgG affinity columns, raising the possibility that Pltgp40 may associate with Fc receptors or Fc receptor-lg complexes. Amino acid sequence analysis of the N-terminus of Pltgp40 was performed and confirmed that Pltgp40 is a novel platelet glycoprotein. Epitopes on Pltgp40 appear to be widely expressed because monoclonal antibodies against Pltgp40 also reacted with a variety of myeloid, lymphoid, and epithelial cells. Pltgp40 was detected on activated but not resting platelets, indicating that Pltgp40 is a platelet activation marker.

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L4 ANSWER 3 OF 9 CAPLUS COPYRIGHT 2003 ACS  
AN 2001:597749 CAPLUS  
DN 135:170781  
TI Stabilization of therapeutic platelets  
IN Wolkers, Willem F.; Crowe, John H.; Tablin, Fern; Oliver, Ann E.; Walker, Naomi J.  
PA The Regents of the University of California, USA  
SO PCT Int. Appl., 36 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001058266	A1	20010816	WO 2001-US4224	20010208
	W: AE, AG, AL, AM, AT, AU, AZ, CR, CU, CZ, DE, DK, DM, DZ, HU, ID, IL, IN, IS, JP, KE, LU, LV, MA, MD, MG, MK, MN, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
	EP 1255439	A1	20021113	EP 2001-907169	20010208
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US	2000-501773	A	20000210		
	WO 2001-US4224	W	20010208		

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 9 CAPLUS COPYRIGHT 2003 ACS  
AN 2001:319654 CAPLUS  
DN 134:331585  
TI Platelet stabilization by treatment with carbohydrates  
IN Stienstra, Stoffer  
PA Quadrant Holdings Cambridge Limited, UK  
SO PCT Int. Appl., 10 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2001030141	A1	20010503	WO 2000-GB4078	20001023
	W: AE, AG, AL, AM, AT, AU, AZ, CR, CU, CZ, DE, DK, DM, DZ, HU, ID, IL, IN, IS, JP, KE, LU, LV, MA, MD, MG, MK, MN, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG	
	EP 1221835	A1	20020717	EP 2000-972970	20001023
	EP 1221835	B1	20030409		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
	JP 2003512392	T2	20030402	JP 2001-532581	20001023
PRAI US	1999-161194P	P	19991022		

GB 1999-26838 A 19991112  
GB 2000-12372 A 20000522  
WO 2000-GB4078 W 20001023

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 9 CAPLUS COPYRIGHT 2003 ACS  
AN 2001:868949 CAPLUS  
DN 136:11285  
TI Compositions for stabilizing platelets for dry storage  
IN Roser, Bruce J.; De Vos, Diana  
PA UK  
SO U.S. Pat. Appl. Publ., 15 pp., Cont. of U.S. Ser. No. 366,810, abandoned.  
CODEN: USXXCO  
DT Patent  
LA English  
FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
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PI US 2001046487 A1 20011129 US 2001-894579 20010628  
PRAI US 1994-366810 B1 19941230

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L9 ANSWER 25 OF 50 CAPLUS COPYRIGHT 2003 ACS  
IN Langlois, Bruno  
TI Drilling fluid containing cellulose nanofibrils and its use for petroleum  
production  
SO PCT Int. Appl., 27 pp.  
CODEN: PIXXD2

L9 ANSWER 26 OF 50 CAPLUS COPYRIGHT 2003 ACS  
IN Hui, Sek Wen; Stoicheva, Natailia; Zhao, Ya-li  
TI Method and compositions for high efficiency loading, transfection and  
fusion of cells by electric pulses  
SO U.S., 15 pp.  
CODEN: USXXAM

L9 ANSWER 27 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
14  
AU Vigano, Alessandra; Bricalli, Dorella; Trabattoni, Daria; Salvaggio,  
Antonino; Ruzzante, Stefania; Barbi, Maria; Di Sanzo, Giuseppe; Principi,  
Nicola; Clerici, Mario (1)  
TI Immunization with both T cell-dependent and T cell-independent vaccines  
augments HIV viral load secondarily to stimulation of tumor necrosis  
factor alpha.  
SO AIDS Research and Human Retroviruses, (June 10, 1998) Vol. 14, No. 9, pp.  
727-734.  
ISSN: 0889-2229.

L9 ANSWER 28 OF 50 CAPLUS COPYRIGHT 2003 ACS  
IN Bronshtein, Victor  
TI Loading and unloading of permeating protectants for cell, tissue, and  
organ cryopreservation by vitrification  
SO PCT Int. Appl., 33 pp.  
CODEN: PIXXD2

L9 ANSWER 29 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
15  
AU Gouvea, Cibele M. C.; Vidal, Benedito C.; Martins, Ione S. (1)  
TI Measuring cytoplasmic calcium level in Citrus protoplasts using the  
fluorescent probe indo-1.  
SO Journal of Plant Physiology, (1997) Vol. 151, No. 3, pp. 329-333.

ISSN: 0176-1617.

L9 ANSWER 30 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
16  
AU Miyamoto, Kensuke; Schopfer, Peter (1)  
TI Sugar release from maize coleoptiles during auxin-, fusicoccin-, and  
acid-mediated elongation growth.  
SO Journal of Plant Physiology, (1997) Vol. 150, No. 3, pp. 309-316.  
ISSN: 0176-1617.

L9 ANSWER 31 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Gordon, Maxwell (1); Deeks, Steven; De Marzo, Charles; Goodgame, Jeff;  
Guralnik, Mario; Lang, William; Mimura, Tohru; Pearce, Daniel; Kaneko,  
Yutaro  
TI Curdlan sulfate (CRDS) in a 21-day intravenous tolerance study in human  
immunodeficiency virus (HIV) and cytomegalovirus (CMV) infected patients:  
Indication of anti-CMV activity with low toxicity.  
SO Journal of Medicine (Westbury), (1997) Vol. 28, No. 1-2, pp. 108-128.  
ISSN: 0025-7850.

L9 ANSWER 32 OF 50 CAPLUS COPYRIGHT 2003 ACS  
AU Haritatos, Edith; Keller, Felix; Turgeon, Robert  
TI Raffinose oligosaccharide concentrations measured in individual cell and  
tissue types in *Cucumis melo* L. leaves: implications for phloem loading  
SO Planta (1996), 198(4), 614-22  
CODEN: PLANAB; ISSN: 0032-0935

L9 ANSWER 33 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
17  
AU Flora, Linda L.; Madore, Monica A. (1)  
TI Significance of minor-vein anatomy to carbohydrate transport.  
SO Planta (Heidelberg), (1996) Vol. 198, No. 2, pp. 171-178.  
ISSN: 0032-0935.

L9 ANSWER 34 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
18  
AU Mathy-Hartert, M. (1); Deby-Dupont, G.; Melin, P.; Lamy, M.; Deby, C.  
TI Bactericidal activity against *Pseudomonas aeruginosa* is acquired by  
cultured human monocyte-derived macrophages after uptake of  
myeloperoxidase.  
SO Experientia (Basel), (1996) Vol. 52, No. 2, pp. 167-174.  
ISSN: 0014-4754.

L9 ANSWER 35 OF 50 CAPLUS COPYRIGHT 2003 ACS  
AU Zalipsky, Samuel; Brandeis, Ester; Mullah, Nasreen; Harding, Jennifer  
TI Synthesis and applications of end-group functionalized poly(ethylene  
glycol)-phospholipid conjugates.  
SO Book of Abstracts, 212th ACS National Meeting, Orlando, FL, August 25-29  
(1996), POLY-038 Publisher: American Chemical Society, Washington, D. C.  
CODEN: 63BFAF

L9 ANSWER 36 OF 50 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
AU VENIERJULIENNE M C (Reprint); VOULDOUKIS I; MONJOUR L; BENOIT J P  
TI IN-VITRO STUDY OF THE ANTILEISHMANIAL ACTIVITY OF BIODEGRADABLE  
NANOPARTICLES  
SO JOURNAL OF DRUG TARGETING, (1995) Vol. 3, No. 1, pp. 23-29.  
ISSN: 1061-186X.

L9 ANSWER 37 OF 50 CAPLUS COPYRIGHT 2003 ACS  
IN Weissleder, Ralph; Bogdanov, Alexei  
TI Crosslinked protein or polysaccharide hydrogels, their preparation, and  
their use in imaging and therapy  
SO PCT Int. Appl., 43 pp.  
CODEN: PIXXD2

L9 ANSWER 38 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
19  
AU WIBAWAN I W T; LAEMMLER C; PASARIBU F H  
TI ROLE OF HYDROPHOBIC SURFACE PROTEINS IN MEDIATING ADHERENCE OF GROUP B  
STREPTOCOCCI TO EPITHELIAL CELLS.  
SO J GEN MICROBIOL, (1992) 138 (6), 1237-1242.  
CODEN: JGMIAN. ISSN: 0022-1287.

L9 ANSWER 39 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU MENON M K C; HARTMANN E  
TI ROLE OF SUGARS ON THE SECRETION OF CELL WALL POLYSACCHARIDES DURING  
DIFFERENTIATION OF APOGAMOUS SPOROPHYNES IN THE MOSS PHYSCOMITRIUM.  
SO BEITR BIOL PFLANZ, (1991 (1992)) 66 (2), 283-295.  
CODEN: BEPFAT. ISSN: 0005-8041.

L9 ANSWER 40 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
20  
AU PIKE W J; CLARKE J; LACEY C J N; HUNTER P A; EVANS E G V  
TI CANDIDA CELL WALL MANNAN IN THE VAGINA AND ITS ASSOCIATION WITH THE SIGNS  
AND SYMPTOMS OF VAGINAL CANDIDOSIS.  
SO J MED VET MYCOL, (1991) 29 (5), 305-312.  
CODEN: JMVMEO. ISSN: 0268-1218.

L9 ANSWER 41 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU GRIFFIOEN A W; RIJKERS G T; CAMBIER J C  
TI FLOW CYTOMETRIC ANALYSIS OF INTRACELLULAR CALCIUM THE POLYCLONAL AND  
ANTIGEN-SPECIFIC RESPONSE IN HUMAN B LYMPHOCYTES.  
SO METHODS (ORLANDO), (1991) 2 (3), 219-226.  
CODEN: MTHDE9. ISSN: 1046-2023.

L9 ANSWER 42 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU HILDRETH J E K; DERR D; AZORSA D O  
TI CHARACTERIZATION OF A NOVEL SELF-ASSOCIATING MR 40000 PLATELET  
GLYCOPROTEIN.  
SO BLOOD, (1991) 77 (1), 121-132.  
CODEN: BLOOAW. ISSN: 0006-4971.

L9 ANSWER 43 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU GAMALEI YU V  
TI THE STRUCTURAL AND FUNCTIONAL EVOLUTION OF MINOR VEINS OF THE LEAF.  
SO BOT ZH (LENINGR), (1988) 73 (11), 1513-1522.  
CODEN: BOTZA9. ISSN: 0006-8136.

L9 ANSWER 44 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU GHINEA N; LEABU M; HASU M; MURESAN V; COLCEAG J; SIMIONESCU N  
TI PRELESIONAL EVENTS IN ATHEROGENESIS CHANGES INDUCED BY  
HYPERCHOLESTEROLEMIA IN THE CELL SURFACE CHEMISTRY OF ARTERIAL ENDOTHELIUM  
AND BLOOD MONOCYTES IN RABBIT.  
SO J SUBMICROSC CYTOL, (1987) 19 (2), 209-228.  
CODEN: JSMCBM. ISSN: 0022-4782.

L9 ANSWER 45 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU TELLAM R L; PARISH C R  
TI THE EFFECT OF SULFATED POLYSACCHARIDES ON THE FREE INTRACELLULAR CALCIUM  
ION CONCENTRATION OF LYMPHOCYTES.  
SO BIOCHIM BIOPHYS ACTA, (1987) 930 (1), 55-64.  
CODEN: BBACAQ. ISSN: 0006-3002.

L9 ANSWER 46 OF 50 CAPLUS COPYRIGHT 2003 ACS  
IN Schwengers, Dieter; Keller, Ingrid  
TI Polysaccharide material and its use as a cell culture microcarrier  
SO Ger. Offen., 19 pp.  
CODEN: GWXXBX

L9 ANSWER 47 OF 50 CAPLUS COPYRIGHT 2003 ACS  
AU Gamalei, Yu. V.  
TI Phloem loading in woody and herbaceous plants  
SO Fiziologiya Rastenii (Moscow) (1985), 32(5), 866-75, 2 plates  
CODEN: FZRSV; ISSN: 0015-3303

L9 ANSWER 48 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU SERPERSU E H; KINOSITA K JR; TSONG T Y  
TI REVERSIBLE AND IRREVERSIBLE MODIFICATION OF ERYTHROCYTE MEMBRANE  
PERMEABILITY BY ELECTRIC FIELD.  
SO BIOCHIM BIOPHYS ACTA, (1985) 812 (3), 779-785.  
CODEN: BBACAQ. ISSN: 0006-3002.

L9 ANSWER 49 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU SUBBOTINA YU L; LEVENSON V I; LYUBINSKAYA M M  
TI COMPARATIVE IMMUNOCHEMICAL AND SEROLOGIC INVESTIGATION OF ANTIGENIC  
COMPOSITION OF RIBOSOMES ISOLATED FROM SHIGELLA-FLEXNERI AND  
SHIGELLA-SONNEI.  
SO IMMUNOLOGIYA, (1983) 0 (5), 58-62.  
CODEN: IMMLDW.

L9 ANSWER 50 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU WETHERELL J R JR; BLEIWEIS A S  
TI ANTIGENS OF STREPTOCOCCUS-MUTANS ISOLATION OF A SEROTYPE SPECIFIC AND A  
CROSS REACTIVE ANTIGEN FROM WALLS OF STRAIN V-100 SEROTYPE E.  
SO INFECT IMMUN, (1978) 19 (1), 160-169.  
CODEN: INFIBR. ISSN: 0019-9567..

=> d 26 28 48 bib ab 19

L9 ANSWER 26 OF 50 CAPLUS COPYRIGHT 2003 ACS  
AN 1998:534834 CAPLUS  
DN 129:119877  
TI Method and compositions for high efficiency loading, transfection and  
fusion of cells by electric pulses  
IN Hui, Sek Wen; Stoicheva, Natailia; Zhao, Ya-li  
PA Health Research Inc., USA  
SO U.S., 15 pp.  
CODEN: USXXAM  
DT Patent  
LA English  
FAN.CNT 1  
PATENT NO. KIND DATE APPLICATION NO. DATE  
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PI US 5789213 A 19980804 US 1995-439187 19950511  
PRAI US 1995-439187 19950511  
AB Methods and compns. are provided for use in electroloading procedures to  
increase the transfection and fusion efficiency compared to the methods  
now used in the art. The compns. comprise a two-phase polymer system  
contg. two water sol. polymers which, when mixed, result in target cells  
and biol. material being encapsulated into one of the polymer phases in a  
concd. form. The methods of the present invention for electroloading  
biol. material into target cells comprises mixing the biol. material into  
one of the phases of the two-phase polymer system; mixing the target cells  
into either of the phases of the two-phase polymer system; mixing the  
phases together to form an emulsion; and exposing the emulsion to a  
pulsing elec. field in an electroloading process.  
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 28 OF 50 CAPLUS COPYRIGHT 2003 ACS  
AN 1997:803775 CAPLUS

DN 128:53192  
TI Loading and unloading of permeating protectants for cell, tissue, and organ cryopreservation by vitrification  
IN Bronshtein, Victor  
PA Universal Preservation Technologies, Inc., USA; Bronshtein, Victor  
SO PCT Int. Appl., 33 pp.  
CODEN: PIXXD2

DT Patent  
LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9745010	A1	19971204	WO 1997-US9207	19970529
	W: AL, AM, AT, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ, DE, DK, DK, EE, EE, ES, FI, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9732900	A1	19980105	AU 1997-32900	19970529
	EP 921723	A1	19990616	EP 1997-928712	19970529
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	JP 2001517204	T2	20011002	JP 1997-542954	19970529
PRAI	US 1996-18638P	P	19960529		
	WO 1997-US9207	W	19970529		

AB The present invention is directed to a method for cryopreserving a biol. sample, including gradually or stepwise loading the sample with permeating protectant by contacting the sample with solns. including the protectant and a non-permeating co-solute that limits the amt. of protectant that penetrates into cells of the biol. specimen. The method further includes the gradual or step of unloading (rehydration) of the sample by contacting the sample with one ore more rehydration solns. having progressively lower concns. of both the protectant and co-solute, such that the protectant is removed from the cells of the sample. Concn. of the co-solute during loading and unloading should be at max. value that still does not damage the sample at room and subzero temps. An example is given for gradual loading and unloading of rat heart with DMSO.

L9 ANSWER 48 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AN 1985:330630 BIOSIS  
DN BA80:622  
TI REVERSIBLE AND IRREVERSIBLE MODIFICATION OF ERYTHROCYTE MEMBRANE  
PERMEABILITY BY ELECTRIC FIELD.  
AU SERPERSU E H; KINOSITA K JR; TSONG T Y  
CS DEP. BIOLOGICAL CHEMISTRY, JOHNS HOPKINS UNIV., SCH. MED., BALTIMORE, MD  
21205, USA.  
SO BIOCHIM BIOPHYS ACTA, (1985) 812 (3), 779-785.  
CODEN: BBACAQ. ISSN: 0006-3002.

FS BA; OLD  
LA English

AB Electric fields of a few kV/cm and of duration in .mu.s are known to implant pores of limited size in cell membranes. A study of kinetics of pore formation and reversibility of pores is reported. Loading of biologically active molecules was also attempted. For human erythrocytes in an isotonic saline, pores allowed passive Rb+ entry formed within 0.5 .mu.s when a 4 kV/cm electric pulse was used. Pores that admitted oligosaccharides were introduced with an electric pulse of a longer duration in an isosmotic mixture of NaCl and sucrose. These pores were irreversible under most circumstances, but they could be resealed in an osmotically balanced medium. A complete resealing of pores that

admitted Rb+ took apprx. 40 min at 37.degree. C. Resealing of pores that admitted sucrose took much longer, 20 h, under similar conditions. In other cell types, resealing step may be omitted due to stronger membrane structures. Experimental protocols for loading small molecules into cells without losing cytoplasmic macromolecules are discussed.

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L9 ANSWER 15 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. DUPLICATE 8  
AU Janes, Kevin A.; Fresneau, Marie P.; Marazuela, Ana; Fabra, Angels; Alonso, Maria Jose (1)  
TI Chitosan nanoparticles as delivery systems for doxorubicin.  
SO Journal of Controlled Release, (15 June, 2001) Vol. 73, No. 2-3, pp. 255-267. print.  
ISSN: 0168-3659.

L9 ANSWER 16 OF 50 MEDLINE DUPLICATE 9  
AU Wolkers W F; Walker N J; Tablin F; Crowe J H  
TI Human platelets loaded with trehalose  
survive freeze-drying.  
SO CRYOBIOLOGY, (2001 Mar) 42 (2) 79-87.  
Journal code: 0006252. ISSN: 0011-2240.

L9 ANSWER 17 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Toner, Mehmet (1); Russo, Michael; Bieganski, Robert  
TI Controlled reversible poration for preservation of biological materials.  
SO Official Gazette of the United States Patent and Trademark Office Patents, (Oct. 3, 2000) Vol. 1239, No. 1, pp. No Pagination. e-file.  
ISSN: 0098-1133.

L9 ANSWER 18 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Barenholz, Yechezkel (1); Bar, Lillianne K.; Diminsky, Dvorah; Baru, Moshe  
TI Method for preparation of vesicles loaded with biological structures, biopolymers and/or oligomers.  
SO Official Gazette of the United States Patent and Trademark Office Patents, (May 23, 2000) Vol. 1234, No. 4, pp. No Pagination. e-file.  
ISSN: 0098-1133.

L9 ANSWER 19 OF 50 MEDLINE DUPLICATE 10  
AU Eroglu A; Russo M J; Bieganski R; Fowler A; Cheley S; Bayley H; Toner M  
TI Intracellular trehalose improves the survival of cryopreserved mammalian cells.  
SO NATURE BIOTECHNOLOGY, (2000 Feb) 18 (2) 163-7.  
Journal code: 9604648. ISSN: 1087-0156.

L9 ANSWER 20 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.  
AU Tablin, Fern (1); Wolkers, Willem F.; Walker, Naomi J. (1); Crowe, John H.  
TI Trehalose loaded, freeze-dried human platelets  
are functional and retain normal protein structure and membrane phospholipid phase transitions.  
SO Blood, (November 16, 2000) Vol. 96, No. 11 Part 1, pp. 62a. print.  
Meeting Info.: 42nd Annual Meeting of the American Society of Hematology San Francisco, California, USA December 01-05, 2000 American Society of Hematology  
ISSN: 0006-4971.

L9 ANSWER 21 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. DUPLICATE 11  
AU Reid, T. J. (1); Esteban, G.; Clear, M.; Gorogias, M.  
TI Platelet membrane integrity during storage and activation.  
SO Transfusion (Bethesda), (June, 1999) Vol. 39, No. 6, pp. 616-624.

ISSN: 0041-1132.

L9 ANSWER 22 OF 50 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.DUPLICATE  
12  
AU Bulpitt, Paul; Aeschlimann, Daniel (1)  
TI New strategy for chemical modification of hyaluronic acid: Preparation of  
functionalized derivatives and their use in the formation of novel  
biocompatible hydrogels.  
SO Journal of Biomedical Materials Research, (Nov., 1999) Vol. 47, No. 2, pp.  
152-169.  
ISSN: 0021-9304.

L9 ANSWER 23 OF 50 MEDLINE DUPLICATE 13  
AU Gilles R; Bourdouxhe-Housiaux C; Colson P; Houssier C  
TI Effect of compensatory organic osmolytes on resistance to freeze-drying of  
L929 cells and of their isolated chromatin.  
SO COMPARATIVE BIOCHEMISTRY AND PHYSIOLOGY. PART A, MOLECULAR AND INTEGRATIVE  
PHYSIOLOGY, (1999 Jan) 122 (1) 145-55.  
Journal code: 9806096. ISSN: 1095-6433.

L9 ANSWER 24 OF 50 SCISEARCH COPYRIGHT 2003 THOMSON ISI  
AU Rudd P M (Reprint); Wormald M R; Dwek R A  
TI Glycosylation and the immune system  
SO TRENDS IN GLYCOSCIENCE AND GLYCOTECHNOLOGY, (JAN 1999) Vol. 11, No. 57,  
pp. 1-21.  
Publisher: FCCA-FORUM CARBOHYDRATES COMING AGE, C/O GAKUSHIN CO LTD, DEPT  
PUBL 2-1-21 TARUMI-CHO, SUITA 564, OSAKA JAPAN.  
ISSN: 0915-7352.